

Attorney Docket No.: 42390.P10248

Application No.: 09/835,154

Page 9

REMARKS

Claims 1-24 remain pending.

In the Office Action, the Examiner rejected claims 1-3, 5-9, 11-15, 17-21, 23, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Raman et al. (U.S. Patent No. 5,400,394) in view of Ashley et al. (U.S. Patent No. 5,535,194); and stated that claims 4, 10, 16, and 22 would be allowable if rewritten in independent form.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2143.

Applicant respectfully traverses the § 103(a) rejection of claims 1-3, 5-9, 11-15, 17-21, 23, and 24 over Raman et al. in view of Ashley et al. Independent claims 1, 7, 13, and 19, as amended, require a system, method and device including, *inter alia*, a "signal canceller employing Auxiliary-Vector filtering at all times during operation of the signal canceller." The combination of Raman et al. and Ashley et al., even if it were proper, fails to teach or suggest all elements of the claimed circuit, method and apparatus.

Page 3 of the Office Action alleges that Ashley et al. teaches auxiliary vector filtering at col. 4, lines 1-8. This portion of Ashley et al., however, teaches or suggests using an auxiliary vector only when double talk is present. See also Fig. 2, elements 58 and 62 of Ashley et al. Thus, Ashley et al. teaches or suggests using an auxiliary vector just for that portion of time

Attorney Docket No.: 42390.P10248

Application No.: 09/835,154

Page 10

when double talk is present. The rest of the time, when double talk is not present, Ashley et al. teaches or suggests using an adaptive vector for filtering (col. 4, lines 1-4; and Fig. 2, element 60). Hence, Ashley et al. fails to teach or suggest a "signal canceller employing Auxiliary-Vector filtering at all times during operation of the signal canceller," as set forth in claims.

The Examiner may be tempted to respond that the auxiliary vector filtering Ashley et al. may somehow be imported into Raman et al. independent of, or without regard to, the adaptive vector filtering. Ashley et al., however, suggests only that the presence or absence of double talk determines the type of filtering used. See col. 3, lines 12-15; the abstract; and the description at col. 3, lines 49 and 50 of "an echo canceller 15 which includes a double talk detector 17."

Ashley et al. suggests only filtering with an auxiliary vector some of the time (e.g., when double talk is present), and this does not meet the "at all times" requirement of claims 1, 7, 13, and 19.

Because the combination of Raman et al. and Ashley et al. fails to teach or suggest all elements of independent claims 1, 7, 13, and 19, a *prima facie* case of obviousness has not been established for these claims. Dependent claims 2, 3, 5, 6, 8, 9, 12, 14, 15, 17, 18, 20, 21, 23, and 24 are allowable at least by virtue of their dependence from claims 1, 7, 13, and 19.

A *prima facie* case of obviousness also has not been established for claims 1-3, 5-9, 11-15, 17-21, 23, and 24, at least because no suggestion or motivation has been provided to combine Raman et al. and Ashley et al. The proposed justification on page 3 of the Office Action, "to reduce noise in [a] communication system," is conclusory and devoid of citation to either reference. Such a bare conclusion does not establish a *prima facie* case of obviousness without evidence supporting that conclusion. Also, no reasoning, in the references or otherwise, has been provided detailing what deficiency or need in the cancel module 208 of Raman et al. would have

Attorney Docket No.: 42390.P10248

Application No.: 09/835,154

Page 11

motivated one of ordinary skill in the art to add the teachings of Ashley et al. Presumably the cancel module 208 "reduce[s] noise" fine on its own, absent any showing of a deficiency or a need in Raman et al. Because no evidence of any motivation to combine the teachings of Raman et al. and Ashley et al. has been provided, a *prima facie* case of obviousness has not been established for claims 1-3, 5-9, 11-15, 17-21, 23, and 24.

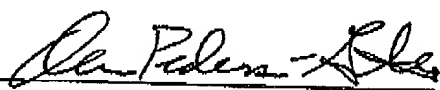
Reconsideration and allowance of pending claims 1-24 is respectfully requested.

In the event that any outstanding matters remain in this application, Applicant requests that the Examiner contact Alan Pedersen-Giles, attorney for Applicant, at the number below to discuss such matters.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess fees to such deposit account.

Respectfully submitted,

Dated: October 13, 2004



Alan Pedersen-Giles
Registration No. 39,996

c/o Intel Americas
LF3
4030 Lafayette Center Drive
Chantilly, VA 20151
(703) 633-1061